

IFWO

RAW SEQUENCE LISTING

DATE: 08/19/2004 TIME: 10:51:44

PATENT APPLICATION: US/10/678,639

Input Set : A:\-1256-3.app

Output Set: N:\CRF4\08192004\J678639.raw

3 <110> APPLICANT: He, Biao You, Liang Xu, Zhidong Jablons, David M. The Regents of the University of California 9 <120> TITLE OF INVENTION: Methods for Treating Cancer by Inhibiting Wnt Signaling 11 <130> FILE REFERENCE: 023070-125630US 13 <140> CURRENT APPLICATION NUMBER: US 10/678,639 14 <141> CURRENT FILING DATE: 2003-10-03 16 <150> PRIOR APPLICATION NUMBER: US 10/264,825 17 <151> PRIOR FILING DATE: 2002-10-04 19 <150> PRIOR APPLICATION NUMBER: US 60/509,037 20 <151> PRIOR FILING DATE: 2002-10-04 22 <150> PRIOR APPLICATION NUMBER: US 60/491,350 23 <151> PRIOR FILING DATE: 2003-07-31 25 <160> NUMBER OF SEQ ID NOS: 80 27 <170> SOFTWARE: PatentIn Ver. 2.1 29 <210> SEO ID NO: 1 30 <211> LENGTH: 370 31 <212> TYPE: PRT 32 <213> ORGANISM: Homo sapiens 34 <220> FEATURE: 35 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #1 37 <400> SEQUENCE: 1 38 Met Gly Leu Trp Ala Leu Leu Pro Gly Trp Val Ser Ala Thr Leu Leu 41 Leu Ala Leu Ala Ala Leu Pro Ala Ala Leu Ala Ala Asn Ser Ser Gly 42 20 25 44 Arg Trp Trp Gly Ile Val Asn Val Ala Ser Ser Thr Asn Leu Leu Thr 45 35 40 47 Asp Ser Lys Ser Leu Gln Leu Val Leu Glu Pro Ser Leu Gln Leu Leu 48 55 50 Ser Arg Lys Gln Arg Arg Leu Ile Arg Gln Asn Pro Gly Ile Leu His 53 Ser Val Ser Gly Gly Leu Gln Ser Ala Val Arg Glu Cys Lys Trp Gln 54 90 Phe Arg Asn Arg Arg Trp Asn Cys Pro Thr Ala Pro Gly Pro His Leu 57 100 105 59 Phe Gly Lys Ile Val Asn Arg Gly Cys Arg Glu Thr Ala Phe Ile Phe 60 120 62 Ala Ile Thr Ser Ala Gly Val Thr His Ser Val Ala Arg Ser Cys Ser 135 140 65 Glu Gly Ser Ile Glu Ser Cys Thr Cys Asp Tyr Arg Arg Gly Pro

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66 145
                        150
                                            155
68 Gly Gly Pro Asp Trp His Trp Gly Gly Cys Ser Asp Asn Ile Asp Phe
                                        170
71 Gly Arg Leu Phe Gly Arg Glu Phe Val Asp Ser Gly Glu Lys Gly Arg
               180
                                    185
74 Asp Leu Arg Phe Leu Met Asn Leu His Asn Asn Glu Ala Gly Arg Thr
        195
                               200
77 Thr Val Phe Ser Glu Met Arg Gln Glu Cys Lys Cys His Gly Met Ser
       210
                           215
80 Gly Ser Cys Thr Val Arg Thr Cys Trp Met Arg Leu Pro Thr Leu Arg
                        230
                                            235
83 Ala Val Gly Asp Val Leu Arg Asp Arg Phe Asp Gly Ala Ser Arg Val
86 Leu Tyr Gly Asn Arg Gly Ser Asn Arg Ala Ser Arg Ala Glu Leu Leu
87
                                    265
89 Arg Leu Glu Pro Glu Asp Pro Ala His Lys Pro Pro Ser Pro His Asp
                                280
92 Leu Val Tyr Phe Glu Lys Ser Pro Asn Phe Cys Thr Tyr Ser Gly Arg
                           295
                                                300
95 Leu Gly Thr Ala Gly Thr Ala Gly Arg Ala Cys Asn Ser Ser Ser Pro
                       310
98 Ala Leu Asp Gly Cys Glu Leu Leu Cys Cys Gly Arg Gly His Arg Thr
                                       330
101 Arg Thr Gln Arg Val Thr Glu Arg Cys Asn Cys Thr Phe His Trp Cys
               340
                                    345
104 Cys His Val Ser Cys Arg Asn Cys Thr His Thr Arg Val Leu His Glu
105
107 Cys Leu
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112 <211> LENGTH: 15
113 <212> TYPE: PRT
114 <213> ORGANISM: Homo sapiens
116 <220> FEATURE:
117 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #2
119 <400> SEQUENCE: 2
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124 <210> SEQ ID NO: 3
125 <211> LENGTH: 12
126 <212> TYPE: PRT
127 <213> ORGANISM: Homo sapiens
129 <220> FEATURE:
130 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #3
132 <400> SEQUENCE: 3
133 Ser Ala Gly Val Thr His Ser Val Ala Arg Ser Cys
134
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                      5
137 <210> SEQ ID NO: 4
138 <211> LENGTH: 13
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Input Set : A:\-1256-3.app

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139 <212> TYPE: PRT
140 <213> ORGANISM: Homo sapiens
142 <220> FEATURE:
143 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #4
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152 <212> TYPE: PRT
153 .<213 > ORGANISM: Homo sapiens
155 <220> FEATURE:
156 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #5
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159 Leu Glu Pro Glu Asp Pro Ala His Lys Pro Pro Ser Pro Cys
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163 <210> SEQ ID NO: 6
164 <211> LENGTH: 23
165 <212> TYPE: PRT
166 <213 > ORGANISM: Homo sapiens
168 <220> FEATURE:
169 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #6
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172 Asp Gly Cys Glu Leu Leu Cys Cys Gly Arg Gly His Arg Thr Arg Thr
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175 Gln Arg Val Thr Glu Arg Cys
176
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179 <210> SEQ ID NO: 7
180 <211> LENGTH: 17
181 <212> TYPE: PRT
182 <213 > ORGANISM: Homo sapiens
184 <220> FEATURE:
185 <223> OTHER INFORMATION: human Wingless-type 1 (Wnt-1) peptide sequence #7
187 <400> SEQUENCE: 7
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189
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191 Leu
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195 <211> LENGTH: 360
196 <212> TYPE: PRT
197 <213> ORGANISM: Homo sapiens
199 <220> FEATURE:
200 <223> OTHER INFORMATION: human Wingless-type 2 (Wnt-2) peptide sequence #1
202 <400> SEQUENCE: 8
203 Met Asn Ala Pro Leu Gly Gly Ile Trp Leu Trp Leu Pro Leu Leu Leu
206 Thr Trp Leu Thr Pro Glu Val Asn Ser Ser Trp Trp Tyr Met Arg Ala
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210
             35
                                  40
212 Ser Ser Gln Arg Gln Leu Cys His Arg His Pro Asp Val Met Arg Ala
215 Ile Ser Gln Gly Val Ala Glu Trp Thr Ala Glu Cys Gln His Gln Phe
218 Arg Gln His Arg Trp Asn Cys Asn Thr Leu Asp Arg Asp His Ser Leu
                     85
                                          90
221 Phe Gly Arg Val Leu Leu Arg Ser Ser Arg Glu Ser Ala Phe Val Tyr
                100
224 Ala Ile Ser Ser Ala Gly Val Val Phe Ala Ile Thr Arg Ala Cys Ser
         115
                                 120
227 Gln Gly Glu Val Lys Ser Cys Ser Cys Asp Pro Lys Lys Met Gly Ser
230 Ala Lys Asp Ser Lys Gly Ile Phe Asp Trp Gly Gly Cys Ser Asp Asn
                        150
                                             155
233 Ile Asp Tyr Gly Ile Lys Phe Ala Arg Ala Phe Val Asp Ala Lys Glu
                    165
                                         170
236 Arg Lys Gly Lys Asp Ala Arg Ala Leu Met Asn Leu His Asn Asn Arg
                                    185
239 Ala Gly Arg Lys Ala Val Lys Arg Phe Leu Lys Gln Glu Cys Lys Cys
            195
                                200
242 His Gly Val Ser Gly Ser Cys Thr Leu Arg Thr Cys Trp Leu Ala Met
                            215
                                                 220
245 Ala Asp Phe Arg Lys Thr Gly Asp Tyr Leu Trp Arg Lys Tyr Asn Gly
                        230
                                             235
248 Ala Ile Gln Val Val Met Asn Gln Asp Gly Thr Gly Phe Thr Val Ala
                    245
                                         250
251 Asn Glu Arg Phe Lys Lys Pro Thr Lys Asn Asp Leu Val Tyr Phe Glu
                260
                                    265
254 Asn Ser Pro Asp Tyr Cys Ile Arg Asp Arg Glu Ala Gly Ser Leu Gly
                                280
257 Thr Ala Gly Arg Val Cys Asn Leu Thr Ser Arg Gly Met Asp Ser Cys
                            295
                                                 300
260 Glu Val Met Cys Cys Gly Arg Gly Tyr Asp Thr Ser His Val Thr Arg
                        310
                                            315
263 Met Thr Lys Cys Gly Cys Lys Phe His Trp Cys Cys Ala Val Arg Cys
                    325
                                        330
266 Gln Asp Cys Leu Glu Ala Leu Asp Val His Thr Cys Lys Ala Pro Lys
                340
                                    345
269 Asn Ala Asp Trp Thr Thr Ala Thr
270
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273 <210> SEQ ID NO: 9
274 <211> LENGTH: 15
275 <212> TYPE: PRT
276 <213> ORGANISM: Homo sapiens
278 <220> FEATURE:
279 <223> OTHER INFORMATION: human Wingless-type 2 (Wnt-2) peptide sequence #2,
          amino acids 49-63 of human Wnt-2
282 <400> SEQUENCE: 9
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Input Set : A:\-1256-3.app

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289 <212> TYPE: PRT
290 <213> ORGANISM: Homo sapiens
292 <220> FEATURE:
293 <223> OTHER INFORMATION: human Wingless-type 2 (Wnt-2) peptide sequence #3
295 <400> SEQUENCE: 10
296 Cys Asp Pro Lys Lys Met Gly Ser Ala Lys Asp Ser Lys Gly
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300 <210> SEQ ID NO: 11
301 <211> LENGTH: 13
302 <212> TYPE: PRT
303 <213> ORGANISM: Homo sapiens
305 <220> FEATURE:
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309 Val Asp Ala Lys Glu Arg Lys Gly Lys Asp Ala Arg Cys
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313 <210> SEQ ID NO: 12
314 <211> LENGTH: 18
315 <212> TYPE: PRT
316 <213> ORGANISM: Homo sapiens
318 <220> FEATURE:
319 <223> OTHER INFORMATION: human Wingless-type 2 (Wnt-2) peptide sequence #5
321 <400> SEQUENCE: 12
322 Asp Val His Thr Cys Lys Ala Pro Lys Asn Ala Asp Trp Thr Thr Ala
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325 Thr Cys
328 <210> SEO ID NO: 13
329 <211> LENGTH: 355
330 <212> TYPE: PRT
331 <213> ORGANISM: Homo sapiens
333 <220> FEATURE:
334 <223> OTHER INFORMATION: human Wingless-type 3 (Wnt-3) peptide sequence #1
336 <400> SEQUENCE: 13
337 Met Glu Pro His Leu Leu Gly Leu Leu Gly Leu Leu Gly Gly
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340 Thr Arg Val Leu Ala Gly Tyr Pro Ile Trp Trp Ser Leu Ala Leu Gly
                 2.0
                                     25
343 Gln Gln Tyr Thr Ser Leu Gly Ser Gln Pro Leu Leu Cys Gly Ser Ile
                                 40
346 Pro Gly Leu Val Pro Lys Gln Leu Arg Phe Cys Arg Asn Tyr Ile Glu
         50
349 Ile Met Pro Ser Val Ala Glu Gly Val Lys Leu Gly Ile Gln Glu Cys
352 Gln His Gln Phe Arg Gly Arg Arg Trp Asn Cys Thr Thr Ile Asp Asp
353
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RAW SEQUENCE LISTING ERROR SUMMARY

DATE: 08/19/2004

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TIME: 10:51:45

Input Set : A:\-1256-3.app

Output Set: N:\CRF4\08192004\J678639.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:56; N Pos. 93

Seq#:56; Xaa Pos. 31

Seq#:57; Xaa Pos. 31

Seq#:62; N Pos. 76

Seq#:62; Xaa Pos. 26

Seq#:63; Xaa Pos. 26

Seq#:64; N Pos. 1,5,13,21

Seg#:68; N Pos. 5

Seq#:75; N Pos. 136,146

Seq#:75; Xaa Pos. 46,49

Seq#:76; Xaa Pos. 46,49

Seq#:80; Xaa Pos. 1,12

VERIFICATION SUMMARY

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Input Set : A:\-1256-3.app

L:3084	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:56	after	pos.:48
L:3085	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:56	after	pos.:96
L:3114	M:341	W:	(46)	$^{\mathfrak{n}}n^{\mathfrak{n}}$	or	"Xaa"	used,	for	SEQ	ID#:57	after	pos.:16
L:3225	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:62	after	pos.:48
L:3226	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:62	after	pos.:96
L:3255	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:63	after	pos.:16
L:3279	M:341									ID#:64		
L:3351	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:68	after	pos.:0
L:3520	M:341											pos.:96
L:3521	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:75	after	pos.:144
L:3524	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:75	after	pos.:144
L:3525	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:75	after	pos.:156
L:3559	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:76	after	pos.:32
												pos.:48
L:3626	M:341	W:	(46)	"n"	or	"Xaa"	used,	for	SEQ	ID#:80	after	pos.:0